

This species is easily distinguished from the other Bahamian taxa growing in limestone that share its reddish cast and papillose surface. All the varieties of *Chamaesyce lecheoides* (Millsp.) Millsp. have glabrous capsules, while the more northern *C. cayensis* (Millsp.) Millsp., which is pubescent, does not have the ciliate stipules of *C. proctorii*. The plant has a strong superficial resemblance to *C. helwigii* (Urb. & Ekm.) Burch, described from a single Haitian collection, but differs from this species in having smaller seeds, markedly ciliate stipules, denser short pubescence on the capsule, deep purple cyathial glands, and well-developed glandular appendages.

The epithet *proctorii* was chosen in recognition of the extensive contributions of Mr. George R. Proctor of the Institute of Jamaica to our knowledge of the flora of the whole Caribbean region.—*Derek Burch, Department of Biology, University of South Florida, Tampa, Florida 33620.*

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## CHROMOSOME COUNTS IN *GRIELUM* AND *CERCIS*

*Grielum sinuatum* L.  $2n = 14$ . SOUTH AFRICA. CAPE PROVINCE: Seed ex Kirstenbosch Botanic Garden and cult. Missouri Botanical Garden *Curtis* 100 (MO).

The genus *Grielum* traditionally has been placed in the family Rosaceae (Bentham & Hooker, 1865: 625–626; Bremekamp & Obermeyer, 1935: 415–416; Thorne, 1968). *Grielum* and the closely allied genera *Neurada* (*N. procumbens* :  $2n = 14$ , Hagerup, 1932; Murin & Chaudhri, 1970) and *Neuradopsis* (uncounted) are generally placed in the subfamily Neuradoideae. The diploid chromosome number obtained from root tip squash preparations of *G. sinuatum* has been determined as  $2n = 14$ , offering additional confirmation of placement in the Neuradoideae. A previous report of *N. procumbens* :  $2n = 12$  (Murbeck, 1916) is most likely incorrect, based on the count reported here and those discussed above. Erdtman (1952) concluded, based on a study of pollen morphology, that a close and singular relationship exists between *Grielum* and *Neurada* as compared to other members of the Rosaceae. However, Erdtman retained both genera in the Rosaceae. The external morphology of *Grielum* and *Neurada* are very similar (Bremekamp & Obermeyer, 1935) and suggest a relationship with the Rosoideae, as does the base chromosome number of  $x = 7$  for Rosoideae. Takhtajan (1969: 223) and Merxmüller (1968) have accorded Neuradoideae family status, after Agardh (1858: 228), with Takhtajan suggesting that the family Neuradaceae is related to the subfamily Rosoideae. While elevation of the Neuradoideae to family status might seem a logical conclusion based on pollen morphology, external morphology and chromosome numbers do not seem to justify this change in rank, nor does such a change offer more valuable insight into the evolution or systematics of the group.

*Cercis canadensis* L.  $n = 7$  U.S.A. native species, cult. Missouri Botanical Garden Curtis 101 (MO).

Previously, both  $n = 6$  (Senn, 1938) and  $n = 7$  (Taylor, 1967) had been reported. The present report for *C. canadensis* is in keeping with those for other species in the genus—*C. occidentalis* :  $2n = 14$  and *C. grifithii* :  $2n = 14$  (Taylor, 1967)—strongly suggesting that the  $n = 6$  determination is incorrect.

#### LITERATURE CITED

- AGARDH, J. G. 1858. *Theoria Systematis Plantarum, Accedit Familiarum Phanerogamarum*. Vol. 1. Lund, Sweden.
- BENTHAM, G. & J. D. HOOKER. 1865. *Genera Plantarum*. Vol. 1. Williams & Norgate, London.
- BREMEKAMP, C. & A. OBERMEYER. 1935. Scientific results of the Vernay-lang Kalahari expedition, March to September, 1930. *Sertum Kalahariense, a list of plants collected*. Ann. Transvaal Mus. 16: 399–455.
- ERDTMAN, G. 1952. *Pollen Morphology and Plant Taxonomy*. The Chronica Botanica Co., Waltham, Massachusetts.
- HAGERUP, O. 1932. Über Polyploidie in beziehung zu Klima, Ökologia und Phylogenie: Chromosomenzahlen aus Timbuktu. *Hereditas* 16: 19–40.
- MERXMÜLLER, H. 1968. *Prodromus einer Flora von Südwestafrika*. 56: Neuradaceae. J. Cramer, Germany.
- MURBECK, S. 1916. Über die Organisation, Biologie und verwandtschaftlichen Beziehungen der Neuradoideen. *Acta Univ. Lund* 12(2): 1–29.
- MURÍN, A. & I. I. CHAUDHRI. 1970. In IOPB chromosome number reports. XXVI. *Taxon* 19: 264–269.
- SENN, H. A. 1938. Chromosome number relationships in the Leguminosae. *Bibliogr. Genet.* 12: 175–345.
- TAKHTAJAN, A. 1969. *Flowering Plants: Origin and Dispersal*. Transl. by C. Jeffrey. Smithsonian Inst. Press, Washington, D.C.
- TAYLOR, R. L. 1967. In IOPB chromosome number reports. XIII. *Taxon* 16: 445–461.
- THORNE, R. F. 1968. Synopsis of a putatively phylogenetic classification of the flowering plants. *Aliso* 4: 57–66.

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## NOMENCLATURAL CHANGES IN *ALNUS* (BETULACEAE)

The following names are published in advance of a revision of the American taxa of *Alnus*. Detailed discussions of these changes will be included in the larger work.

*Alnus acuminata* H.B.K. is a variable species occurring throughout much of mountainous Mexico, Central America, and South America. It is seen as consisting of the following subspecies in addition to the nominate one.

***Alnus acuminata* subsp. *arguta* (Schlechtendal) Furlow, comb. et stat. nov.**

*Betula arguta* Schlechtendal, *Linnaea* 7: 139. 1832; *Alnus arguta* (Schlechtendal) Spach, *Ann. Sci. Nat. Bot.*, sér. 2, 15: 205. 1841. TYPE: "Prope San Miguel del Soldado, Nau-lingo, Acatlán, et Chiconquiaco," *Schiede* 21 (HAL?, not seen; MO!, isotype or isosyn- type).